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“FROM DEAD TO DYNAMO”

REMARKS AS PREPARED FOR DELIVERY

Thank you for that kind introduction. I am thrilled to be here with you today. You have given me an opportunity to highlight the fact that we have reached a watershed moment in one of the FCC's major communications policy initiatives.

No, I'm not talking about broadcast ownership or broadband roll-out. I'm not here to convince you that a healthy broadcast industry is better for America than an anemic one, or that the build-out of broadband platforms will require significant capital investment, which will not flow when the space is heavily regulated. Both of these areas have garnered a tremendous amount of attention lately, and I've already spent a lot of my time talking about them.

Today, on the other hand, and consistent with the theme of this conference, I want to focus my remarks on the DTV transition and the Commission's ambitious agenda in this area.

I. “The Way We Were”

First, I need to provide some context for these remarks. When Chairman Powell took the helm of the FCC, the DTV transition was plodding along so slowly that many observers were questioning whether, in fact, it could ever be completed. In December of 2000, the magazine Electronic Business, which covers electronic media as closely as any that I know of, called the DTV transition “A Disaster by Definition.” Similarly, in an October 2000

speech, then Chairman Kennard chided broadcasters for not using their digital allotments, calling them “spectrum squatters.” Others had even less charitable comments. Meanwhile, broadcast stations were blaming the cable industry, while the networks and cable programmers were reluctant to produce compelling digital programming, and digital television equipment sales were flat-lined. The transition was moribund.

When I was playing college football, we had a saying. “It’s not whether you win or lose; it’s where you place the blame.” In the DTV game at the end of the millennium, it seemed everyone had a preferred bearer of blame.

And there was plenty to go around. After all, why would a broadcast network invest in expensive production for an over-the-air DTV service when only 170 stations -- of some 1300 commercial stations -- were broadcasting a DTV signal as of the end of 2000? But why would a station bother constructing expensive DTV facilities, and double its energy consumption, to broadcast both in analog and digital formats, when DTV set sales were completely anemic? According to CEA, there were only about 625,000 DTV sets in America in December of 2000, and new sets were not selling fast. But no wonder – the median price for a basic DTV set then was \$2,201. By comparison, a DVD player cost only about \$200 at that time. The slow pace of sales, in turn, prevented manufacturers from realizing the economies that can result from mass production – economies that are particularly pronounced, I have been told, in the manufacture of consumer electronics equipment.

II. “Don’t Rain on My Parade”

That was then, this is now. Today there are over 1,200 stations on the air with DTV operations – more than 500 of which are on the air with licensed facilities, the others are operating with special or experimental DTV authority. According to the NAB, over 99% of U.S. TV Households now have an over-the-air DTV service available to them.

Meanwhile, the number of DTV sets in the market has grown by leaps and bounds. CEA reports that there are approximately 4.3 million sets in American homes, and the median set price has fallen to \$1,441. That number is dropping by something like 2% per month as set sales increase. Consumer electronics representatives tell me that \$1000 is the magic number. When set prices fall below \$1000, sales are expected to increase

dramatically. So do the math. Set prices are now about \$1,500; decreasing by 2% per month, so in about a year and a half we should see the median price of DTV sets to fall below the \$1000 mark.

In the meantime, consumer demand for digital equipment is surpassing all expectations. Indeed, DTV set sales already have outpaced any other consumer electronics technology at the same point in development – that includes VCRs, DVDs, and color TVs. Consumer acceptance of digital television technology seems to be general and broad-based.

Why are consumers making the switch to digital television? Content. The range of high value programming available to consumers with digital equipment is exploding. All of CBS's scripted prime time comedies and dramas, and most of its prime time movies and sporting events including college football and a weekly NFL football game are produced in high definition. Similarly, all of ABC's scripted prime time comedies, dramas, and theatrical movies, the NBA finals, NHL finals, and Monday night football now are available in HD. NBC is almost there and Fox recently committed to high definition programming.

As for cable programming services, 2 channels of HBO and 2 channels of Showtime are now in HD, Discovery provides an HD service, ESPN HD has recently launched, and HDNet provides a variety of HD Movies, sports, and programming services. There is even In Demand HD-VOD.

In contrast to the headlines and news stories of December 2000, we now read headlines like this one from USA Today in August, "As for the [DTV] View, Its Grrreat," or this one from June, "MSOs Accelerate HDTV Rollouts as Consumer Demand Surges." We are, in short, witnessing one of the most dramatic market-place shifts in recent memory; perhaps the most dramatic ever.

III. "Gotta Move"

So what has happened? How did we go from *dead* to *dynamo* in about two years? Although there is no doubt that a lot of people have put a lot of work into the digital transition, one name stands above all others when you try to answer that question – Michael K. Powell. Chairman Powell was honored with the Government Leadership Award by the Academy of Digital Television Pioneers earlier this year, and the honor was richly deserved. I

am biased, of course, but no one comes close to Chairman Powell in terms of taking a DTV transition that was in crisis two years ago and turning it into a stunning success story.

It started when Chairman Powell created the DTV Task Force to be a central repository for DTV ideas, and a clearinghouse for DTV-related activities. It was in the skunk works of the DTV Task Force that an idea was born of using a voluntary DTV plan, which would allow the industries a great deal of flexibility in advancing the transition, rather than coercive micromanagement of the transition through direct regulation. In the Spring of 2002, Chairman Powell issued what is referred to as “the Powell Plan,” which asked each of the industries with a stake in the DTV transition to put aside their own parochial interests, stop the finger pointing and blame laying, and take positive steps forward in their own corner of the DTV transition.

For example, he asked the top four broadcast networks, as well as HBO and Showtime to provide high-definition or other “value-added DTV programming” during at least 50% of their prime-time schedule, beginning with the 2002-03 season. Value-added DTV programming may be high-definition, innovative multicasting, interactive services or other programming, so long as it gives consumers something significantly different than that which they are receiving in analog.

With respect to broadcast licensees, the Chairman challenged the affiliates of the top four networks in the top 100 markets to install the equipment necessary to pass through network DTV signals without degradation; that is, to pass through HD programming if that is what the network provides, by January 1, 2003.

The Chairman asked the cable industry to commit to carrying, at no cost, the signals of up to five digital broadcast or other digital programming services during at least 50% of their prime-time schedule in cable systems with 750 MHz or higher channel capacity by January 1, 2003. The Chairman also challenged the cable industry to provide subscribers the option of leasing or purchasing a single set-top box that allows for the display of high definition programming. These devices were to include digital connectors.

Similarly, the Chairman challenged the direct broadcast satellite TV industry to carry the signals of up to five digital programming services that are

providing value-added digital programming during at least 50% of their prime-time schedule by January 1, 2003.

With respect consumer electronics retailers, the Chairman asked that they do a better job of marketing broadcast, cable and satellite DTV options to consumers at point-of-sale.

Finally, the Chairman asked equipment manufacturers to commit to meeting the demand for cable set-top boxes that allow for the display of high definition programming and include over-the-air DTV tuners in new broadcast television receivers according to a phased in schedule. They were also challenged to include digital inputs on all new HD-capable television receivers by January 1, 2004.

With the exception of the consumer electronics manufacturers, each of the industries responded positively and with vigor to the Chairman's challenge. Cable immediately began to roll-out digital services, programmers began producing compelling programming in high definition, broadcasters have made Herculean efforts to bring their transmission systems into the 21st Century digital environment, and retailers have stepped up efforts to educate and train their sales staffs so that consumers get reliable and accurate information when they begin to consider the purchase of digital television equipment.

The one industry that did not quickly embrace the Powell Plan – the consumer electronics manufacturers – soon found that the full legal force of the Commission was brought to bear to make sure that their reticence to include DTV tuners in television sets was not an impediment to the transition. In August of 2002, the Commission voted to require the inclusion of DTV tuners in television sets according to a phased in plan beginning with the largest sets. The one thing this will ensure is that, at some point in the future as television sets are retired naturally, everyone in America will have equipment capable of receiving digital signals.

In any event, as successful as the original Powell Plan was, it was only the first step. In 2003, Chairman Powell followed up on his original challenge by sending out detailed information requests to the industries in order to monitor progress, and to understand better the impediments to final transition. We are in the midst of reviewing the responses to those requests and attempting to reduce the voluminous data collected to aggregated

summary numbers from which we may draw conclusions and identify areas where additional work is needed.

While we are in the process of doing this, the Chairman has directed us to bring to closure a number of regulatory proceedings tied inextricably to the DTV transition. I can tell you, as the one trying to pull lots of these strings together, the DTV agenda for the next six months is incredibly comprehensive and ambitious.

Looking forward from today, however, you only get a partial view of this effort. It actually began in August when the Commission initiated its LPTV NPRM. Through this proceeding the FCC will establish rules and policies for the digital transition of television translator and low power stations. These stations deliver television services to some of the smallest communities in the United States, serve areas in rural parts of the country remote from metropolitan areas, and sometimes provide the only source of local television programming in their communities. The transition of these stations is, therefore, an essential element to final DTV transition.

Without pausing for a breath, we next rolled out our so-called “plug and play” Report and Order, which will make it easier and more convenient for consumers to access one-way digital cable services, with fewer boxes, wires, and remotes. Gary Shapiro of CEA called the adoption of a plug and play standard “a huge decision for the transition” and I’ve been told by people with interests in virtually all quarters that it was perhaps the most important step in the digital transition since the adoption of a high definition digital standard. As a result of this action, consumers will soon find that, in addition to displays for satellite products at stores like Circuit City and Best Buy, there will be displays for digital-cable products as well.

So plug and play was, as Gary said, “huge,” but it was not the end of the story. Again, almost without pause, we have moved to complete our work on so-called “broadcast flag,” or redistribution control descriptor. And today the Commission voted on an item dealing with those commercial broadcasters who requested a third extension on their DTV build-out deadline. I think when it was all said and done, people will recognize that the Commission, though reasonable, is being very tough on these requests. There is less and less patience within the FCC for broadcasters who fail to get their digital signals on the air.

We will end the Fall dealing, I hope, with digital carriage and by completing our DTV Periodic Review, both of which have to do with establishing baseline rules for DTV operations on broadcast and cable platforms. As I hope you can tell even from this brief overview, this will be quite a six month stretch in terms of the DTV transition. During these few months the Commission will tackle and resolve more DTV related issues than in any comparable period in the past.

IV. “Tomorrow”

But this, too, is merely another step in a long and complex process. Our work doesn't end when these last items go out the door. The larger point here is not that we are done, but that, under Chairman Powell's leadership, the FCC is moving aggressively on all fronts to see the transition to its end using what I refer to as a “Push/Pull” approach. We *push* industries to make necessary upgrades and commit to digital television so that the infrastructure for success is in place. This takes the form of hard look review when broadcasters ask for construction extensions, tuner mandates when the consumer electronics industry was slow to build products that will actually receive next generation broadcasts, and hoe-downs (our meetings with the parties) to push industries to resolve sticky technical issues.

But we also *pull* the digital transition along by providing regulatory incentives to completion of major steps. We've provided a vehicle for broadcasters to begin digital broadcasting at lower power, we've taken steps to improve content protection capabilities in a digital age, and we are working to ensure that digital signals are carried on cable and that consumer equipment in the marketplace is capable of receiving them.

This push/pull approach has been a demonstrated success, but we have a lot of work ahead of us. Although we are nearing the end of what might be thought of as the “infrastructure development” stage of the transition, we are only at the beginning of the “consumer adoption” stage. And more and more it is becoming apparent that significant strides remain to be made in the area of consumer education.

I travel around the country a fair amount in my job and I always enjoy talking to people about the media services they use, what they like and don't like, complaints they may have, and what they think the future holds. Although a lot of people seem to have heard about digital television, very

few know what it is or have any understanding of even some of the basic terms. Some of the questions I hear are: What is the difference between digital television and high definition television? I subscribe to the “digital” tier offered by my cable operator; do I still need to buy a digital television? I have a TV that was advertised as “enhanced definition,” is that the same as high definition? I have a plasma TV, so I’m already watching things in high definition, right?

These and other questions greet me wherever I travel. And it is not that consumers are incapable of grasping the DTV concepts. To the contrary, people seem to put more energy and time into understanding their television set than almost any other technology that they have to deal with in their daily life. I know my brother-in-law spent more time shopping for his last TV than he did for his car.

The problem is that the information out there is spotty, confusing, and sometimes contradictory. Unfortunately, consumer education is the one part of the transition that the FCC has the least control over and input into. We are not a Madison Avenue advertising firm, we don’t do Public Service Announcements, and we don’t have large budgets to promote products. I can go on, of course, like the Johnny Appleseed of digital television, planting interest and information about digital television wherever I go, but it’s a big country out there and my single-handed efforts are not going to substantially improve the level of consumer knowledge in this area.

No, the industries that have a financial stake in this transition have to step up to the plate and push DTV. American consumers have to understand the equipment that they are being asked to buy, the services they will get, and what it will take to get those services. They also have to better understand the choices they have and the impact that the end of the transition will have on their analog equipment.

Now, the picture is not all bleak on this front. For one thing, consumer electronics retailers are doing a much better job in training their staffs to sell digital television equipment. Two years ago, when I became Chief of what was then the Cable Services Bureau at the FCC, I started doing informal personal surveys of retailers every few weeks or months. I go into electronics stores on the pretense of being an average consumer who knows very little about DTV but would like to know more. I ask a lot of questions. Two years ago I got a lot of wrong answers, or sometimes just blank stares.

By contrast, a few weeks ago I was in a Circuit City store near my home and I talked to a sales person who I think knew more about the digital transition than I do. This is consistent with the trend that I've been seeing more generally among CE retailers. Sales people, at least, understand the transition and are becoming accomplished at explaining it to customers. So I'm starting to have confidence that, once consumers get into a store, they will get pretty good information on how to board the DTV train.

The difficulty is getting them into the stores in the first place. Unlike many other consumer products, DTV must be experienced, not just heard about. In particular, it is becoming apparent that -- at this stage of the transition -- HDTV is proving to be the real driver for digital adoption. There may come a time when new applications using digital television spectrum are in command, but today it is the crystal clear picture in high definition that is selling sets.

But here a picture really is worth a thousand words. I liken HDTV to putting on my first pair of prescription glasses -- I suddenly realized that I couldn't see anything before. But even having heard me say that, I'm pretty sure that I will not find a lot of you down at the local television store tomorrow morning trying to buy a high definition television.

This is the big challenge confronting all of those involved in the DTV transition. How do we get people to see and experience high definition for themselves? Perhaps there ought to be more demos out there. If I were a retailer, I would think very seriously about donating HDTV sets to sports bars. And those that have the rights to unique content have to ensure that it is available in high definition and that consumers know about it -- particularly sports programming. It was, after all, the 1921 broadcast of the World Series between the Yankees and the Giants that many regard as the birth of commercial broadcasting. It's time to get people buying digital television equipment on a large scale. One football game a week in HD is ok as a tantalizer -- the entire schedule in HD would make it impossible for a football fan NOT to have a high definition television in her home.

Perhaps I am asking too much. Some of this seems like a stretch right now. But two years ago it would have seemed equally impossible to achieve the kind of progress that we so recently have. I think, in fact, that we are right on the doorstep of turning the transition from one pushed by government and industry, to one pulled by consumer demand.

Thus, although completion of the transition seemed like a pipe dream only two years ago, I am confident that we will see significant set penetration within the next two to five years. Enough to meet the statutory standard for transition – almost certainly no, but far, far more than anyone would have guessed in 2001.

I'm proud of the role the Media Bureau has played in this transition, proud to have worked with Chairman Powell to implement his vision, and proud of the industries that have helped to make this happen. As I said, there is a lot that remains to be done, but I am more optimistic than I've been on this issue. Achieving full transition to digital television will enhance the quality and quantity of broadcast services available to the public and release large bands of spectrum for other commercial and public safety uses. All of us have a stake in this. I look forward to working with all of you to get it done.

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